

Aeronautics Educator Guide			
2006 Mathematics			
Program of Studies			
Kentucky Mathematics			
Grades K-3			
Activity/Lesson	State	Standards	
Air Engines (12-16)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Rotor Motor (69-75)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.K-3.MA-P-NPO-S-NS1	read, write, count and model whole numbers 0-10,000, developing an understanding of place value for ones, tens, hundreds, thousands and ten thousands
Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.K-3.MA-P-NPO-S-PNO2	skip-count forwards and backwards by 2s, 5s, 10s and 100s, using manipulatives, mental math and written and electronic means to communicate understanding
Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.K-3.MA-P-DAP-S-DR3	read, display, compare and interpret student-collected data
Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.K-3.MA-P-DAP-S-ES3	use tools (including technology when appropriate) to organize and display student-collected data
Making Time Fly (80-86)	KY	MA.K-3.MA-P-DAP-U-2	the collection, organization, interpretation and display of data can be used to answer questions.
Where is North? The Compass Can Tell Us (87-90)	KY	MA.K-3.MA-P-DAP-U-4	inferences and predictions from data are used to make critical and informed decisions.
Where is North? The Compass Can Tell Us (87-90)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Let's Build a Table Top Airport (91-96)	KY	MA.K-3.MA-P-G-U-4	visualization, spatial reasoning and geometric relationships model real-world situations.
Plan to Fly There (97-106)	KY	MA.K-3.MA-P-M-S-SM2	describe, define, give examples of and use to solve real-world and/or mathematical problems both nonstandard and standard (U.S. Customary, metric) units of measurement to include length, time, money, temperature (Fahrenheit and Celsius) and weight
We Can Fly, You and I: Interdisciplinary Learning (107-108)	KY	MA.K-3.MA-P-M-S-SM2	describe, define, give examples of and use to solve real-world and/or mathematical problems both nonstandard and standard (U.S. Customary, metric) units of measurement to include length, time, money, temperature (Fahrenheit and Celsius) and weight
Dunked Napkin (17-22)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data

Dunked Napkin (17-22)	KY	MA.K-3.MA-P-DAP-S-ES2	use data from student investigations to make predictions or draw simple conclusions
Paper Bag Mask (23-28)	KY	MA.K-3.MA-P-M-S-MPA4	choose and use appropriate tools for specific measurement tasks
Paper Bag Mask (23-28)	KY	MA.K-3.MA-P-DAP-U-4	inferences and predictions from data are used to make critical and informed decisions.
Paper Bag Mask (23-28)	KY	MA.K-3.MA-P-DAP-S-DR6	analyze and make inferences from data displays (drawings, tables/charts, tally tables, pictographs, bar graphs, circle graphs, line plots, two-circle Venn diagrams)
Paper Bag Mask (23-28)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Wind in Your Socks) (29-35)	KY	MA.K-3.MA-P-M-S-MPA6	estimate weight, length, perimeter, area, angle and time using appropriate units of measurement
Wind in Your Socks) (29-35)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Bag Balloons (40-43)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Sled Kite (44-51)	KY	MA.K-3.MA-P-DAP-S-ES1	pose questions to generate data
Right Flight (52-59)	KY	MA.K-3.MA-P-DAP-U-4	inferences and predictions from data are used to make critical and informed decisions.
Right Flight (52-59)	KY	MA.K-3.MA-P-DAP-S-ES2	use data from student investigations to make predictions or draw simple conclusions
Delta Wing Glider (60-68)	KY	MA.K-3.MA-P-M-S-MPA3	use standard units of measurement to identify, describe and compare measurable attributes of objects (e.g., length, weight, volume) and make estimates using appropriate units of measurement
Delta Wing Glider (60-68)	KY	MA.K-3.MA-P-DAP-U-4	inferences and predictions from data are used to make critical and informed decisions.
Delta Wing Glider (60-68)	KY	MA.K-3.MA-P-DAP-S-ES2	use data from student investigations to make predictions or draw simple conclusions

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Program of Studies

Kentucky Mathematics			
Grade 4			
Activity/Lesson	State	Standards	
Air Engines (12-16)	KY	MA.4.MA-4-DAP-S-DR3	pose questions and choose an appropriate method to collect, organize and display student-collected data to answer the questions
Air Engines (12-16)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Rotor Motor (69-75)	KY	MA.4.MA-4-DAP-S-DR3	pose questions and choose an appropriate method to collect, organize and display student-collected data to answer the questions
Rotor Motor (69-75)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them

Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.4.MA-4-NPO-S-PNO2	skip-count forwards and backwards by 2s, 3s, 4s, 5s, 10s, 20s, 25s, 50s, 100s, 1,000s and 10,000s and use manipulatives, mental math and written and electronic means to communicate understanding
Flight: Interdisciplinary Learning Activities (76-79)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Making Time Fly (80-86)	KY	MA.4.MA-4-DAP-U-2	the collection, organization, interpretation and display of data can be used to answer questions.
Making Time Fly (80-86)	KY	MA.4.MA-4-DAP-S-DR3	pose questions and choose an appropriate method to collect, organize and display student-collected data to answer the questions
Making Time Fly (80-86)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Where is North? The Compass Can Tell Us (87-90)	KY	MA.4.MA-4-DAP-S-DR3	pose questions and choose an appropriate method to collect, organize and display student-collected data to answer the questions
Where is North? The Compass Can Tell Us (87-90)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Let's Build a Table Top Airport (91-96)	KY	MA.4.MA-4-G-U-5	visualization, spatial reasoning and geometric relationships model real-world situations.
Plan to Fly There (97-106)	KY	MA.4.MA-4-M-S-MPA2	relate time to days, weeks, months and years
Plan to Fly There (97-106)	KY	MA.4.MA-4-M-S-MPA3	add and subtract time to solve problems
We Can Fly, You and I: Interdisciplinary Learning (107-108)	KY	MA.4.MA-4-M-S-SM2	describe, define, give examples of and use to solve real-world and/or mathematical problems both nonstandard and standard (U.S. Customary, metric) units of measurement to include length, weight, time, money and temperature (°F and °C)
We Can Fly, You and I: Interdisciplinary Learning (107-108)	KY	MA.4.MA-4-DAP-U-2	the collection, organization, interpretation and display of data can be used to answer questions.
Sled Kite (44-51)	KY	MA.4.MA-4-DAP-S-DR3	pose questions and choose an appropriate method to collect, organize and display student-collected data to answer the questions
Sled Kite (44-51)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Right Flight (52-59)	KY	MA.4.MA-4-M-S-MPA8	use measurements to describe and compare attributes of objects, including length, width, height, money (cost), temperature and weight, and sort and compare objects using attributes
Right Flight (52-59)	KY	MA.4.MA-4-DAP-S-ES1	pose questions and collect, organize, interpret and display data to answer them
Delta Wing Glider (60-68)	KY	MA.4.MA-4-M-S-MPA8	use measurements to describe and compare attributes of objects, including length, width, height, money (cost), temperature and weight, and sort and compare objects using attributes

Delta Wing Glider (60-68)	KY	MA.4.MA-4-DAP.U-4	inferences and predictions from data are used to make critical and informed decisions.
Delta Wing Glider (60-68)	KY	MA.4.MA-4-DAP.S-ES1	pose questions and collect, organize, interpret and display data to answer them